

DEPARTMENT OF BUILDING AND DEVELOPMENT

COUNTY OF LOUDOUN

MEMORANDUM

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LOUDOUN COUNTY  
DEPARTMENT OF PLANNING

DATE: February 25, 2010

TO: Marchant Schneider, Project Manager, Department of Planning

FROM: Todd Taylor, Environmental Review Team *T*

THROUGH: William Marsh, Environmental Review Team Leader *W*

CC: Laura Edmonds, Environmental Review Team  
Theresa Miller, Zoning Planner  
Kelly Williams, Community Planner, Department of Planning

**SUBJECT: SPEX-2007-0021 Route 50 Medical Campus  
(2nd Submission)**

The Environmental Review Team (ERT) has reviewed the revised application, including plat dated March 2007, revised through January 8, 2010. The main environmental impacts/concerns can be summarized as follows: permanent impacts to all wetlands, removal of all existing tree cover, and no water quality treatment for the northern portion of the site. To help lessen these impacts, staff provides the following recommendations:

1. The project results in the permanent impact to all on-site wetlands. Staff understands that ZMAP-2006-0007 includes a wetland mitigation proffer. However, the proffer requires mitigation to occur within Loudoun County only if pricing is comparable. To better comply with Revised General Plan (RGP) River and Stream Corridor Policy 23, staff recommends that a commitment be provided with this application that excludes pricing as a limiting factor. It has been staff's experience that wetland credits outside of Loudoun County are less expensive, making the existing proffer meaningless.
2. Staff recommends providing water quality measures for the northern portion of the property. RGP Surface Water Policy 2 and River and Stream Corridor Policy 11 support the implementation of LID techniques and the protection of stream segments draining less than 100 acres not included in the River and Stream Corridor buffer. The proposed layout results in a substantial amount of impervious cover associated with buildings and parking areas. As currently depicted, the northern portion of the campus will drain directly to an existing wetland/stream system without any type of water quality protective measure. Although stormwater requirements may allow for a

“by-pass” scenario, providing water quality measures in the northern portion of the property would allow the project to better comply with the referenced RGP policies.

3. With regards to noise impacts associated with Route 50 and the airport, the applicant's responses agree to provide acoustical treatment to achieve an interior noise level of 55 dBA for the hospital, which does not meet RGP and Revised Countywide Transportation Plan (Revised CTP) noise policies. The applicant's proposal is higher than the 52 dBA identified in the Noise Abatement Criteria (NAC) Hourly A-Weighted Sounds levels table on page 5-45 of the RGP and page 4-7 of the Revised CTP. Furthermore, the applicant's proposal is significantly higher than the 45 dBA recommended by staff due to the hospital being located within the Ldn 60 airport noise buffer and the fact that the hospital use requires overnight accommodations similar to residential uses. Staff recommends that a commitment be provided to perform a traffic noise study and a building shell analysis prior to occupancy to ensure noise levels do not exceed 45 dBA, consistent with RGP and Revised CTP policies. A similar commitment was provided as a condition of approval for special exception application SPEX-2007-0037, for the Hospice use immediately to the west, across Stone Springs Boulevard.
4. The applicant's responses state that they have a history of incorporating green building design standards into their hospitals and are working to incorporate many of those features within the proposed hospital. The responses reference features such as commissioning building systems to determine efficiency, high efficient lighting fixtures, water conserving sinks and toilets, energy star appliances, landscaping with indigenous plants, and using interior products with little or no VOCs or PVCs. The responses go on to state that as the design becomes more finalized, the applicant will be able to highlight more of its green building practices. Staff supports incorporation of green building design approaches and is available to discuss design options with the applicant. County school and public facilities have had recent success incorporating such measures and could be a resource with the proposed project. Including green building design standards within the hospital may reduce long-term costs. In addition, to improve power reliability and efficiency, the applicant may also want to consider combined heat and power (CHP) functionality. A CHP Resource Guide for Hospital Applications can be found at [http://www.chpcentermw.org/12-00\\_library.html#macdocument](http://www.chpcentermw.org/12-00_library.html#macdocument).

Please contact me if you need additional information or have questions.